

CLAIMS

1 1. A mechanism for delivering power to an on-die component, said mechanism
2 comprising:
3 a package unit having a low frequency delivery path and a high frequency delivery
4 path; and
5 a die having said on-die component and a capacitive device each coupled in parallel
6 between a first node and a second node, said die further including a low frequency reception
7 path and a high frequency reception path, said low frequency reception path to couple to said
8 low frequency delivery path on said package unit and to said first node, and said high
9 frequency reception path to couple to said high frequency delivery path on said package unit
10 and to said first node.

1 2. The mechanism of claim 1, wherein said on-die component comprises a buffer
2 circuit.

3. The mechanism of claim 1, wherein said high frequency delivery path on said
package unit includes a capacitive element.

1 4. The mechanism of claim 3, wherein said high frequency delivery path on said
2 package unit further includes a resistive element.

1 5. The mechanism of claim 4, wherein said resistive element comprises a damping

2 resistor.

1 6. The mechanism of claim 1, wherein said high frequency reception path on said die
2 includes a resistive element coupled to said first node.

1 7. The mechanism of claim 1, wherein said resistive element comprises a damping
2 resistor.

1 8. The mechanism of claim 1, wherein said board comprises a power supply device.

1 9. The mechanism of claim 1, wherein said die comprises an integrated circuit.

1 10. A power delivery system comprising:

2 a circuit board including a power supply device to provide a voltage signal;

3 a package to couple to said board so as to receive said voltage signal and having a first
4 delivery path to provide a first output voltage signal and a second delivery path to provide a
5 second output voltage signal; and

6 a die to couple to said package so as to receive said first output voltage signal at a first
7 node and to receive said second output voltage signal at a second node, said die having a
8 capacitive element and a component coupled in parallel between said first node and a third
9 node so as to receive voltage signals from said package, wherein said power delivery system
10 includes a resistive element provided between said second node and said first node.

11. The system of claim 10, wherein said component comprises a buffer circuit.

12. The system of claim 10, wherein said second delivery path on said package unit includes a capacitive element.

13. The system of claim 10, wherein said die comprises an integrated circuit.

14. A power delivery system comprising:

a package having a first node, a second node, a third node, a fourth node and a fifth node, said package having a first delivery path between said first node and said third node, said package further having a second delivery path between said second node and said fourth node; and

a die having a sixth node, a seventh node and an eighth node, said sixth node to couple to said third node of said package, said seventh node to couple to said fourth node of said package, said eighth node to couple to said fifth node of said package, said die including a component provided between said seventh node and said eighth node and a capacitive element provided between said sixth node and said eighth node, wherein said power delivery

11 system further includes a resistive element coupled between said second node and said sixth
12 node.

1 15. The system of claim 14, wherein said component comprises a buffer circuit.

1 16. The system of claim 14, wherein said second delivery path on said package unit
2 includes a capacitive element.

1 17. The system of claim 16, wherein said resistive element is provided on said second
2 delivery path between said second node and said fourth node.

1 18. The system of claim 17, wherein said resistive element comprises a damping
2 resistor.

1 19. The system of claim 14, wherein said resistive element is provided on said die unit
2 between said seventh node and said sixth node.

1 20. The system of claim 14, wherein said die comprises an integrated circuit.

1 21. A power delivery system comprising:
2 a power supply;
3 a first unit to couple to said power supply at a first input node and a second input

node, said first unit including means for providing a low frequency signal at a first output
node and means for providing a high frequency signal at a second output node; and
a second unit including a first input node to couple to said first output node of said
first unit and a second input node to couple to said second output node of said first unit, said
second unit including a component and a decoupling capacitor coupled in parallel.

22. The system of claim 21, wherein said component comprises a buffer circuit.

23. The system of claim 21, wherein said means for providing a high frequency signal
comprises a capacitive element.

24. The system of claim 21, wherein second unit includes a resistive element coupled
between said first input node and said second input node of said second unit.

25. The system of claim 24, wherein said resistive element comprises a damping
resistor.

26. The system of claim 21, wherein said second unit comprises an integrated circuit.